

north of Khartoum is naturally sandy in tone, while that from the more marshy region southwards is greyer.

An immature hare from Gerazi, near Khartoum, collected by Mr. H. F. Witherby, also appears to be *L. Hawkeri*, but is too young to be certainly determinable.

Heuglin's *L. microtis*, founded on a young specimen, is a still more southern form from the forest-region about 7° N. by 30° E. It is a strong-coloured forest type of hare, and has apparently nothing to do with the open-country hares of the *L. athiopicus* and *Hawkeri* group.

XXXIX.—*A List of Lepidoptera collected by Mr. Ewart S. Grogan in Central Africa.* By EMILY MARY SHARPE.

DR. SCLATER has placed in my hands the collection of Lepidoptera formed by Mr. Ewart S. Grogan during his celebrated journey through Africa from the Cape to Cairo*.

The bulk of this collection was obtained in the Karonga district, to the north of Lake Nyasa, and on the Rusisi River, which flows into the north of Lake Tanganyika. One or two specimens were procured in the Mushari country, between Lake Kivu and the Albert Edward Nyanza, and these species are apparently undescribed.

Throughout this paper I have referred to Prof. Aurivillius's 'Rhopalocera Æthiopica,' and when the nomenclature differs from this standard work, it will be understood that the identifications have been made from the specimens in the National Collection as recently arranged by Dr. Butler, Mr. F. A. Heron, and Sir George Hampson.

Family Danaididæ.

1 *Tirumala Petiverana*.

Danaiida limniace, var. *Petiverana* (Doubl.); Aurivillius, *Rhopalocera Æthiopica*, p. 33 (1898).

a, b. ♂. River Longwe, Karonga. January.

c. ♂. Volcanoes, 7000 feet. June.

2. *Amauris Grogani*, sp. n.

Allied to *A. damocles*, Beauv., as regards the situation of the white spots on the primaries, but in general appearance resembling *Amauris Ansongei*, Sharpe.

Primaries. Ground-colour dark brownish black, relieved

* See 'Geographical Journal,' vol. xvi. 2, pp. 164-184 (1900).

by a number of white spots as in *A. damocles*; the white spot between the first and second median nervule not extending so far as in the last-named species; all the spots somewhat smaller in size than in *A. damocles*.

Secondaries with more than half the wing brownish black; the basal area pale ochre; near the hind margin a row of nearly obsolete whitish spots, those near the apical area being the most strongly marked.

Underside. Central area of the primaries dark brownish black, the apical area lighter brown; all the white spots distinctly marked, but much reduced in size when compared with those of *A. damocles*. *Secondaries* with more than half the wing light brown, the basal area pale ochre-yellow; the extreme base dark brown, this colour extending along the costal margin; near the hind margin a distinct row of white spots, varying in size and situated between the nervules; on the extreme edge a row of minute white twin-spots.

♂. Expanse 4.1 inches.

Hab. Mushari, 8000 feet. June.

This species may be considered one of the many forms belonging to the groups of *A. damocles* and *A. echeria*, but it is one of the most pronounced and distinct of all the races which a certain school of entomologists unite under one heading, ignoring the fact that differences of coloration are accompanied by a separate and distinct geographical distribution.

3. *Amauris Bumilleri*.

Amauris ochleides, var. *Bumilleri*, Staud.; Aurivillius, t. c. p. 33 (1898).

a. ♂. River Longwe, Karonga. January.

Family Satyridæ.

4. *Gnophodes Grogani*, sp. n.

Allied to *G. parmeno*, Doubl. & Hewits., but at once distinguished by the large dark band on the primaries.

Primaries. Ground-colour rich brown, with a distinct transverse band of dull ochreous yellow near the apical area; this band broadest on the costal margin and gradually diminishing along the hind margin; a large dark brown band above the sub-median nervure, extending into the cell. The outline of the wings is more rounded than in *G. parmeno*, especially as regards the primaries.

Secondaries. Entirely rich brown, with a pale fulvous line indicated along the hind margin.

Underside. Very similar to that of *G. parmeno*, but with the

whole aspect of the primaries darker, the lighter bands having a faint shading of mauve; the small spots near the apex yellow.

Secondaries. Much duller than in *G. parmeno*, the characteristic streak along the costal margin darker; the hind-marginal row of spots yellow instead of white; a distinct shading of mauve apparent on the inner margin.

Expanse 2·9 inches.

Hab. Mushari, 8000 feet. June.

5. *Physcæneura pione*.

Physcæneura pione, Godman; Aurivillius, *t. c.* p. 69 (1898).

a. Karonga. January.

6. *Ypthima pupillaris*.

Ypthima pupillaris, Butler; Aurivillius, *t. c.* p. 78 (1898).

a. Karonga. January.

Family *Acræidæ*.

7. *Acræa balbina*.

Acræa insignis, Distant (part.); Aurivillius, *t. c.* p. 89 (1898).

a. Karonga. January.

8. *Acræa zetes*.

Acræa zetes (Linn.); Aurivillius, *t. c.* p. 90 (1898).

a. ♂. Karonga. January.

9. *Acræa Doubledayi*.

Acræa Doubledayi, Guérin; Aurivillius, *t. c.* p. 99 (1898).

a, b. ♂ ♀. Karonga. January.

10. *Acræa egina*.

Acræa egina (Cramer); Aurivillius, *t. c.* p. 92 (1898).

a. ♂. Rusisi River, 3600 feet. May.

This specimen shows some red internervular streaks on the primaries; it is in perfect condition, and I imagine that these streaks are only seen when the butterfly is not abraded.

11. *Acræa natalica*.

Acræa natalica, Boisduval; Aurivillius, *t. c.* p. 100 (1898).

a. ♀. Karonga. January.

12. *Acræa perrupta*.

Acræa terpsichore (Linn.); Aurivillius (part.), *t. c.* p. 104 (1898).

a, b. ♂ ♀. Karonga. January.

13. *Acræa vinidia*.

Acræa vinidia, Hewits.; Aurivillius, *t. c.* p. 105 (1898).

a. Karonga. January.

b. Rusisi Valley, 3300 feet. May.

14. *Acræa दौरα*.

Acræa encedon (Linn.); Aurivillius (part.), *t. c.* p. 110 (1898).

a. Rusisi Valley, 3300 feet. May.

Family *Nymphalidæ*.

15. *Precis boopis*.

Precis orithya (Linn.); Aurivillius (part.), *t. c.* p. 135 (1898).

a-e. ♂. Karonga. January.

f-h. ♀. Karonga. January.

i. ♀. Rusisi Valley, 3300 feet. May.

16. *Precis cebrene*.

Precis ænone (Linn.); Aurivillius (part.), *t. c.* p. 135 (1898).

a. ♂. Karonga. January.

17. *Precis Trimeni*.

Precis Trimeni, Butler; Aurivillius, *t. c.* p. 137 (1898).

a. Karonga. January.

18. *Precis elgiva*.

Precis terea, var. *elgiva* (Drury); Aurivillius, *t. c.* p. 141 (1898).

a. Karonga. January.

19. *Precis artaxia*.

Precis artaxia, Hewits.; Aurivillius, *t. c.* p. 143 (1898).

a, b. Plateau Chamba. January.

20. *Hypolimnas mima*.

Hypolimnas dubius, Palisot, var. (et ab.) *mima*, Aurivillius, *t. c.* p. 149 (1898).

a. Karonga. January.

21. *Eurytela dryope*.

Eurytela dryope (Cramer); Aurivillius, *t. c.* p. 154 (1898).

a, b. Rusisi Valley, 3300 feet. May.

22. *Neptidopsis velleda*.

Neptidopsis ophione (Cramer), var. *velleda*, Aurivillius, *t. c.* p. 156 (1898).

a. Karonga. January.

23. *Ergolis enotrea*.*Ergolis enotrea* (Cramer); Aurivillius, *t. c.* p. 156 (1898).*a, b.* Rusisi Valley, 3300 feet. May.24. *Crenis rosa*.*Crenis rosa*, Hewits.; Aurivillius, *t. c.* p. 161 (1898).*a-f.* ♂. Karonga. January.*g-j.* ♀. Karonga. January.25. *Neptis saclava*.*Neptis saclava*, Boisduval; Aurivillius, *t. c.* p. 166 (1898).*a.* Rusisi Valley, 3300 feet. May.26. *Neptis agatha*.*Neptis agatha*, Stoll; Aurivillius, *t. c.* p. 167 (1898).*a.* Rusisi Valley, 3300 feet. May.27. *Ham anumida dædalus*.*Ham anumida dædalus* (Fabricius); Aurivillius, *t. c.* p. 181 (1898).*a.* Karonga. January.28. *Charaxes Guderiana*.*Charaxes Guderiana*, Dewitz; Aurivillius, *t. c.* p. 238 (1898).*a.* Karonga. January.29. *Charaxes argynnides*.*Charaxes juhluca*, Trimen, var. *argynnides* (Westw.); Aurivillius, *t. c.* p. 240 (1898).*a.* Rusisi River, 3600 feet. May.Family **Lycænidæ**.30. *Teriomima Hildegarda*.*Teriomima Hildegarda*, Kirby; Aurivillius, *t. c.* p. 271 (1898).*a.* Karonga. January.31. *Virachola antalus*.*Deudorix antalus*, Hopffer; Aurivillius, *t. c.* p. 309 (1898).*a.* Karonga. January.32. *Hypolycæna philippus*.*Hypolycæna philippus*, Fabricius; Aurivillius, *t. c.* p. 316 (1898).*a, b.* ♀. Karonga. January.33. *Hypolycæna cæculus*.*Hypolycæna cæculus*, Hopffer; Aurivillius, *t. c.* p. 316 (1898).*a, b.* ♂ ♀. Karonga. January.

34. *Axiocerses harpax*.*Axiocerses harpax*, Fabricius; Aurivillius, *t. c.* p. 335 (1898).*a.* Karonga. January.35. *Cacyreus linzeus*.*Cupido linzeus*, Cramer; Aurivillius, *t. c.* p. 360 (1898).*a.* ♀. Karonga. January.36. *Polyommatus bæticus*.*Cupido bæticus*, Linn.; Aurivillius, *t. c.* p. 367 (1898).*a.* ♂. Karonga. January.37. *Catochrysops asopus*.*Cupido malathana*, Boisduval (part.); Aurivillius, *t. c.* p. 373 (1898).*a.* ♀. Karonga. January.38. *Catochrysops peculiaris*.*Cupido peculiaris*, Rogenhofer; Aurivillius, *t. c.* p. 378 (1898).*a.* ♀. Karonga. January.

Family Pieridæ.

39. *Belenois mesentina*.*Pieris mesentina* (Cramer); Aurivillius, *t. c.* p. 407 (1898).*a.* ♂. Plateau Chamba. January.40. *Belenois instabilis*.*Pieris subeida*, Felder; Aurivillius (part.), *t. c.* p. 408 (1898).*a.* ♂. Rusisi Valley, 3300 feet. May.41. *Belenois dentigera*.*Pieris dentigera*, Butler; Aurivillius, *t. c.* p. 409 (1898).*a.* ♂. Rusisi Valley, 3300 feet. May.42. *Teracolus ocale*.*Teracolus evippe* (Linn.), var. (ab.?) *ocale*, Boisd.; Aurivillius, *t. c.* p. 433 (1898).*a.* ♂. Rusisi Valley, 3300 feet. May.43. *Teracolus gavis*.*Teracolus achine* (Cramer), var. *æstiv. extrema gavis*, Wallengr.; Aurivillius, *t. c.* p. 436 (1898).*a.* ♀. Rusisi Valley, 3300 feet. May.44. *Terias senegalensis*.*Terias senegalensis*, Boisd.; Aurivillius, *t. c.* p. 451 (1898).*a.* Rusisi Valley, 3300 feet. May.

Family Papilionidæ.

45. *Papilio Mackinnoni*.

Papilio Mackinnoni, E. M. Sharpe; Aurivillius, *t. c.* p. 472 (1898).

a. Volcanoes, Mfumbiro district, 7000 feet. June.

46. *Papilio nireus*.

Papilio nireus, Linn.; Aurivillius, *t. c.* p. 475 (1898).

a, b. Rusisi River, 3600 feet. May.

47. *Papilio demodocus*.

Papilio demodocus, Esper; Aurivillius, *t. c.* p. 477 (1898).

a, b. Karonga. January.

Family Hesperidæ.

48. *Rhopalocampta forestan*.

Rhopalocampta forestan (Cramer); Holland, P. Z. S. 1896, p. 98.

a, b. Rusisi Valley, 3300 feet. May.

HETEROCEA.

Family Sphingidæ.

49. *Chærocampa celerio*.

Theretra celerio (Linn.), Kirby, Lepid. Heterocera, i. p. 652 (1892).

a. Karonga. January.

Family Limacodidæ.

50. *Chrysopoloma polana*.

Cosuma polana, Druce, P. Z. S. 1887, p. 682, pl. lv. fig. 8.

Karonga. January.

Family Noctuidæ.

51. *Ophideres fullonica*.

Ophideres fullonica (Linn.); Hamps., Fauna Brit. India, Moths, ii. p. 560 (1894).

a. North end, Tanganyika. April.

52. *Argadesa materna*.

Ophideres materna (Linn.); Butler, P. Z. S. 1888, p. 84.

a. Karonga. January.

53. *Remigia archesia*.

Remigia archesia (Cram.); Butler, P. Z. S. 1893, p. 682.

a. Rusisi River, 3500 feet. May.

54. *Hypocala Moorei*.

Hypocala Moorei, Butl.; Hamps., Fauna Brit. India, Moths, ii. p. 454 (1894).

a. Chosi River. February.

55. *Azazia rubricans*.

Azazia rubricans (Boisd.); Butler, P. Z. S. 1887, p. 574.

a. Ikomba. February.

56. *Plusia eriosoma*.

Plusia eriosoma, Doubl.; Butler, P. Z. S. 1898, p. 424.

a. Ikomba. February.

57. *Eutelia* sp.

a. Longwe, Karonga. January.

Family Agaristidæ.

58. *Xanthospilopteryx superba*.

Eusemia superba, Butler, P. Z. S. 1893, p. 674.

a, b. Karonga. January.

59. *Pristoceraea alba*.

Pristoceraea alba, Rothschild, Nov. Zool. iv. p. 183 (1897).

a. Karonga. January.

Family Arctiidæ.

60. *Acantharctia flavicosta*.

Amsacta flavicosta, Hampson, Annals of the South-African Museum, ii. p. 53 (1900).

a. Karonga. January.

Family Hypsidæ.

61. *Nyctemera leuconoe*.

Leptosoma leuconoe (Hopff.); Butler, P. Z. S. 1893, p. 678.

a. Rusisi Valley, 3300 feet. May.

Family Geometridæ.

62. *Gonodela amandata*.

Macaria amandata, Walker, Cat. Lepid. Heter., Geom. xxiii. p. 922 (1861).

a. Rusisi Valley, 3500 feet. May.

63. *Gonodela brongusaria*.

Gonodela brongusaria (Walk.); Butler, P. Z. S. 1893, p. 683.

a. Rusisi Valley, 3500 feet. May.

64. *Nemoria unilinea*.*Nemoria unilinea*, Warren, Nov. Zool. v. p. 235 (1898).

a. Rusisi Valley, 3000 feet. May.

Family Pyralidæ.

65. *Filodes costivitalis*.*Filodes costivitalis*, Guen. Réunion, p. 65.

a. Ikomba. February.

Family Crambidæ.

66. *Crambus carpherus*.*Crambus carpherus*, Hampson, Ann. & Mag. Nat. Hist. (7) i. p. 159 (1898).

a. Karonga. January.

XL. — *Further Notes on the Pangoninæ of the Family Tabanidæ in the British Museum Collection.* By Miss GERTRUDE RICARDO.

For an alphabetical catalogue of the whole family of Tabanidæ the one published by Dr. Kertész, of Budapest, January 1900, will be found very useful.

Those species marked with an asterisk (*) are in the British Museum Collection. As regards the Bigot types, I am indebted to Mr. Verrall for his courtesy in lending them to me for examination.

Silvius and its allied genera are dealt with in this paper, as a continuation of that on *Pangonia*, Latr., and its allied genera in Ann. & Mag. Nat. Hist. (7) v. p. 97 (1900).

Scepsis, Walker, Dipt. Saund. i. p. 71 (1850), should have been included in the first paper and would follow at the end of the table as :—

13 a. First joint of palpus thickened *Scepsis*, Walk.

**Scepsis nivalis*, Walker, l. c. pl. ii. fig. 7; Loew, Dipt. Südafrik. p. 15 (1860).

South America.

The type in the British Museum Collection is a female, with the antennæ wanting, but they are well figured in the plate, though the spines present on the hind tibiæ are omitted. The type is labelled South America, 68. 4 (*Saunders Coll.*).